

HEAD-UP DISPLAY

ABSTRACT OF THE DISCLOSURE

A head-up display includes an image source, such as a laser scanner, a means for diffusing light and a transparent element that can include a holographic element. The laser scanner emits a visible light for generating an image. The means for diffusing light
5 receives the visible light from the laser scanner to project the image thereon, and preferably apply gain thereto. The transparent element produces a virtual or a real image of the image from the means for diffusing light. In a vehicle, the head-up display is configured to reflect the image into the vehicle to provide a virtual image ahead of a driver.